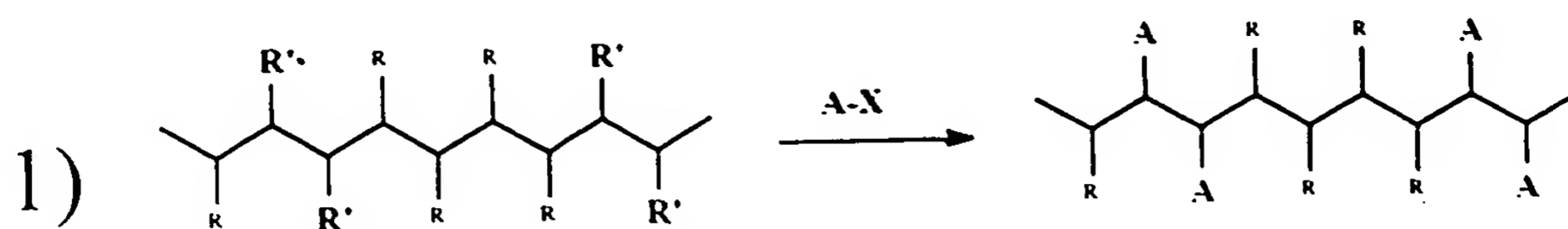
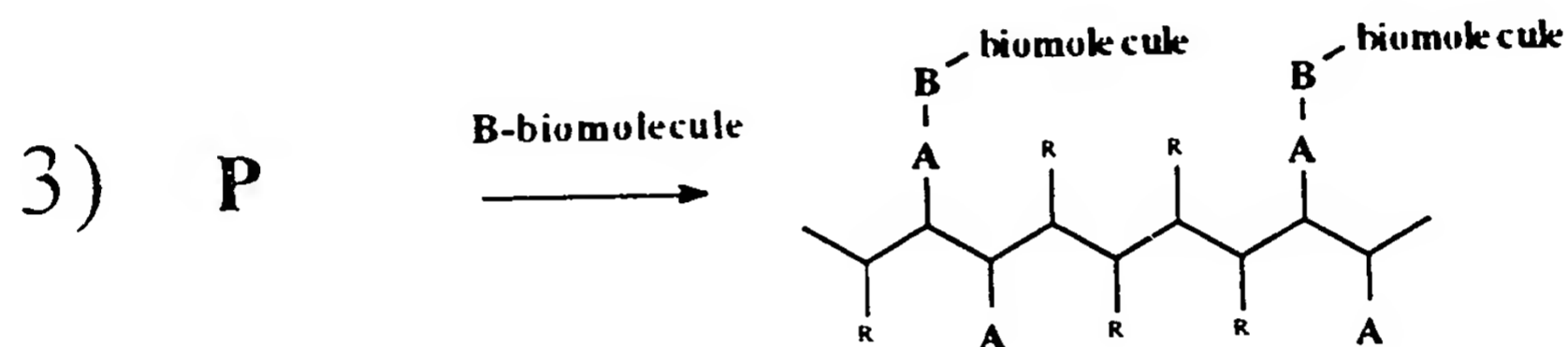
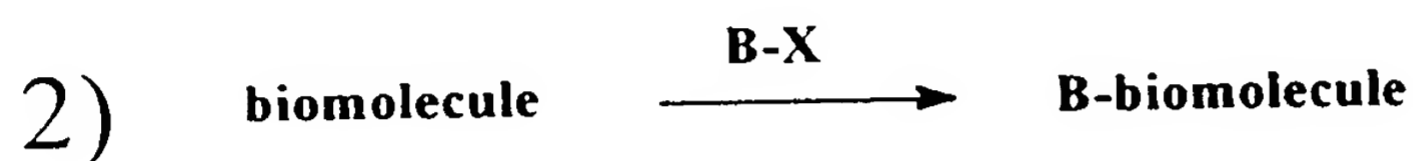


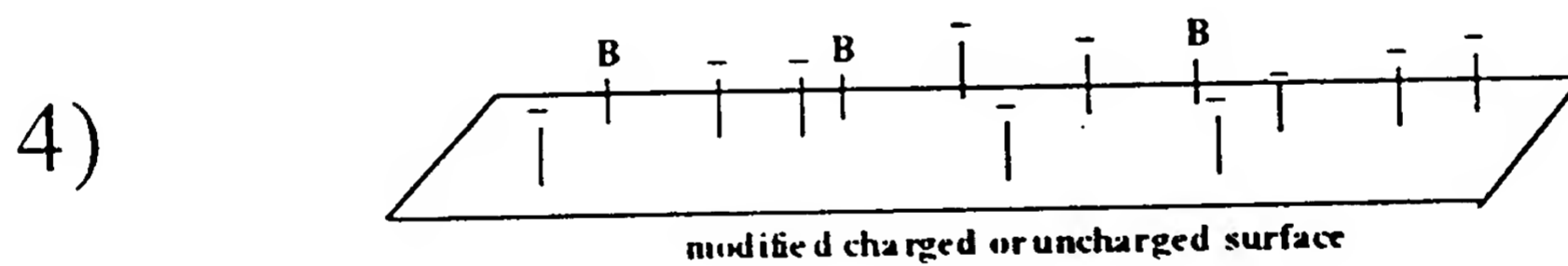
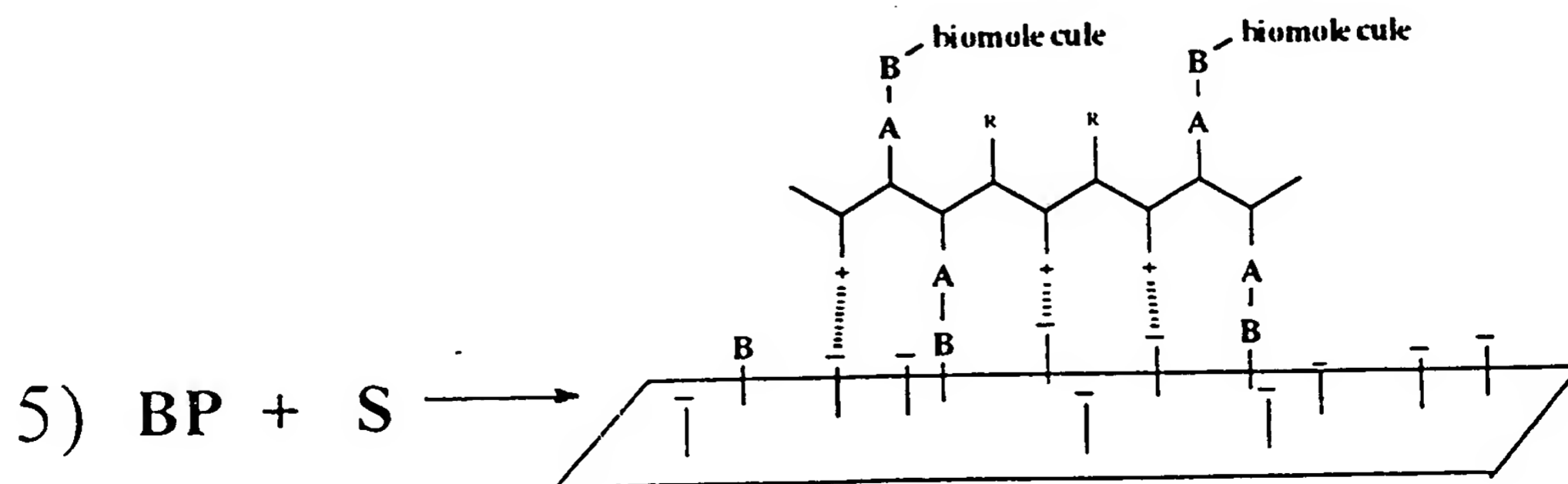
Figure 1

**P**

where R' is the same or
different than R

**BP**

biomolecule/polymer conjugate

**S****BPS**

biopolymer/polymer/surface ternary system

Figure 2

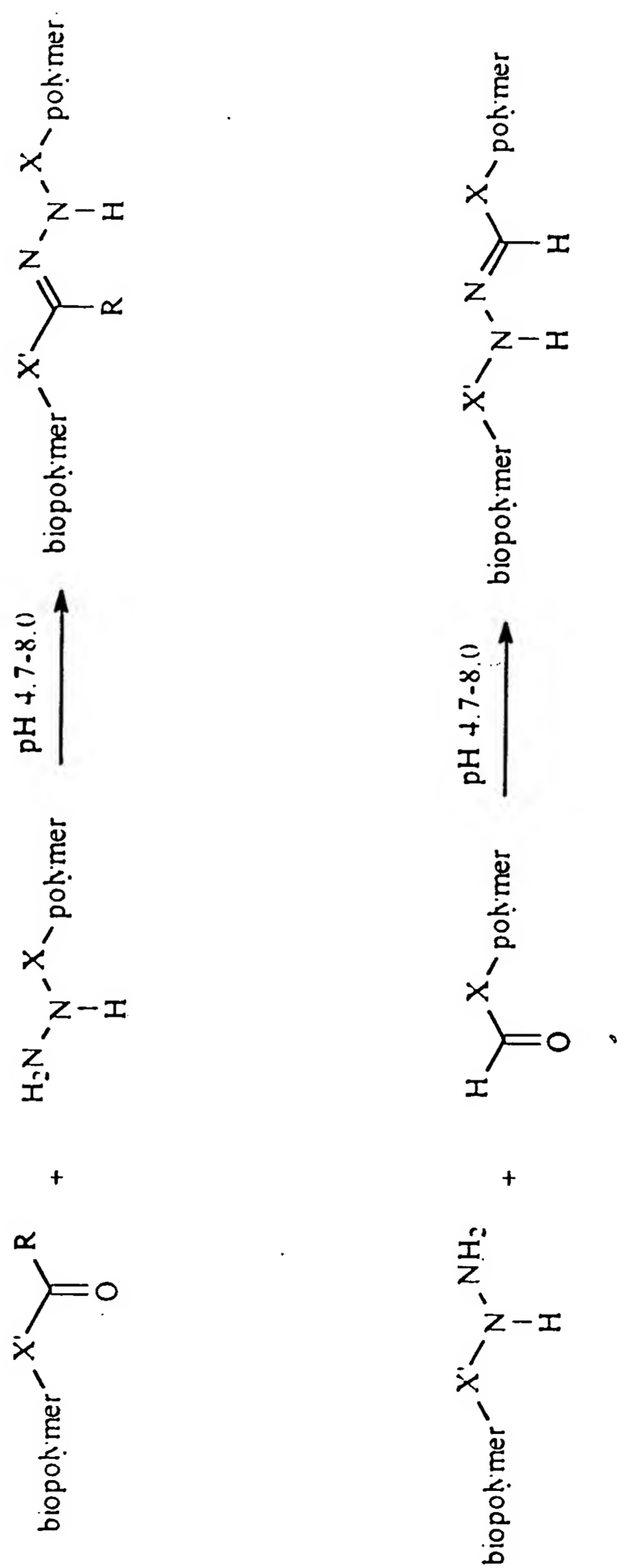
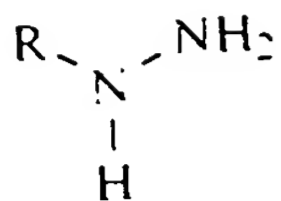
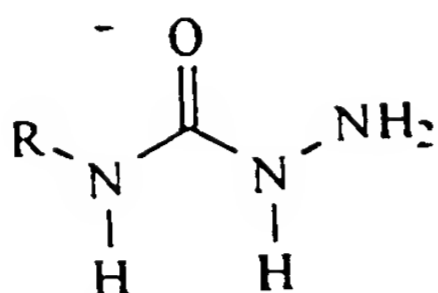


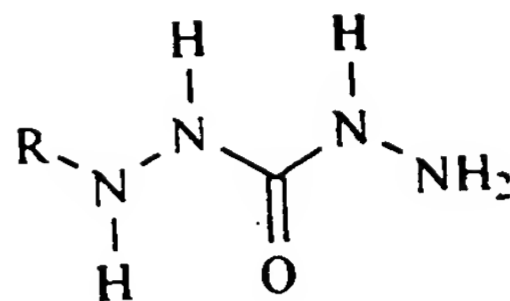
Figure 3



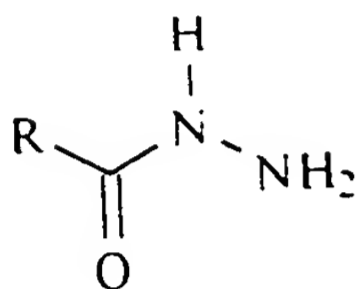
hydrazine



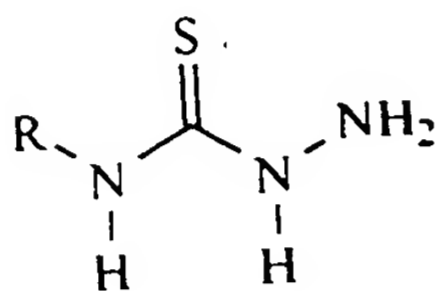
semicarbazide



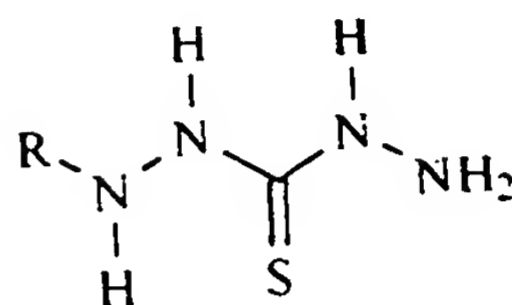
carbazide



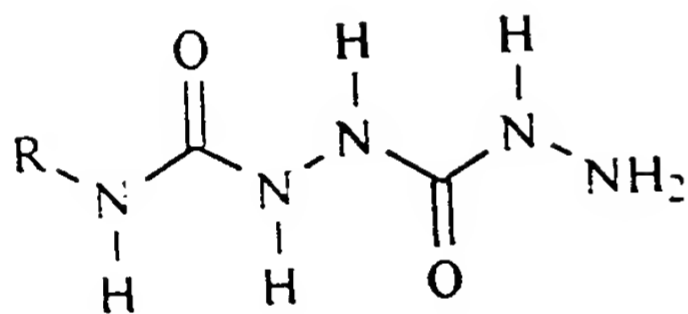
hydrazide



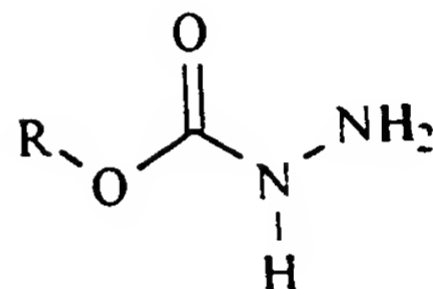
thiosemicarbazide



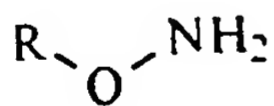
thiocarbazide



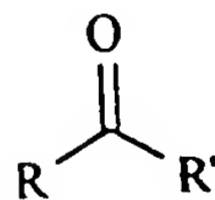
carbonic acid dihydrazine



hydrazine carboxylate



aminoxy



R = alkyl, aromatic or heteroaromatic group

R' = H or straight, branched or cyclic alkyl moiety
or aromatic or heteroaromatic moiety

carbonyl derivatives

Figure 4

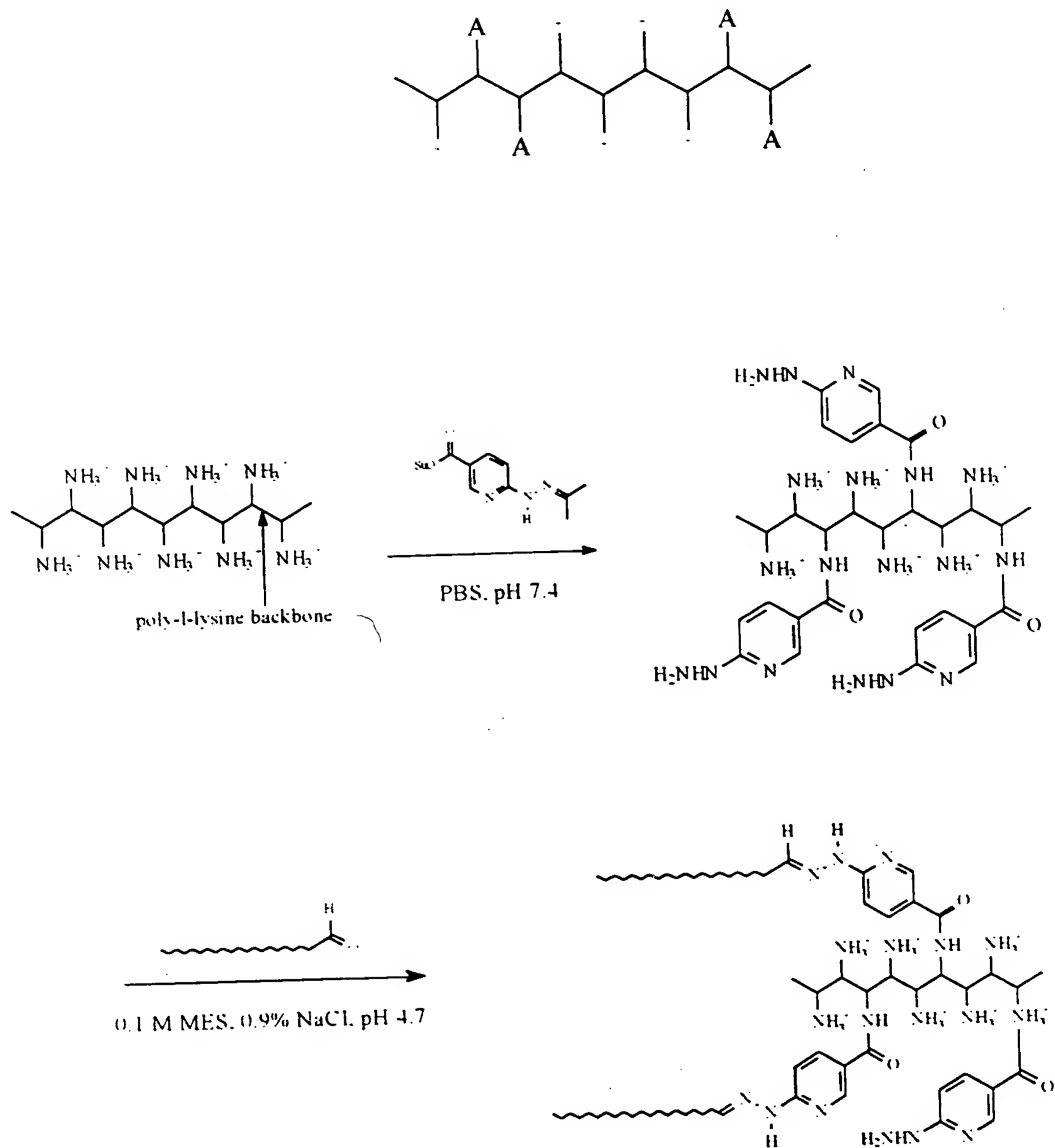
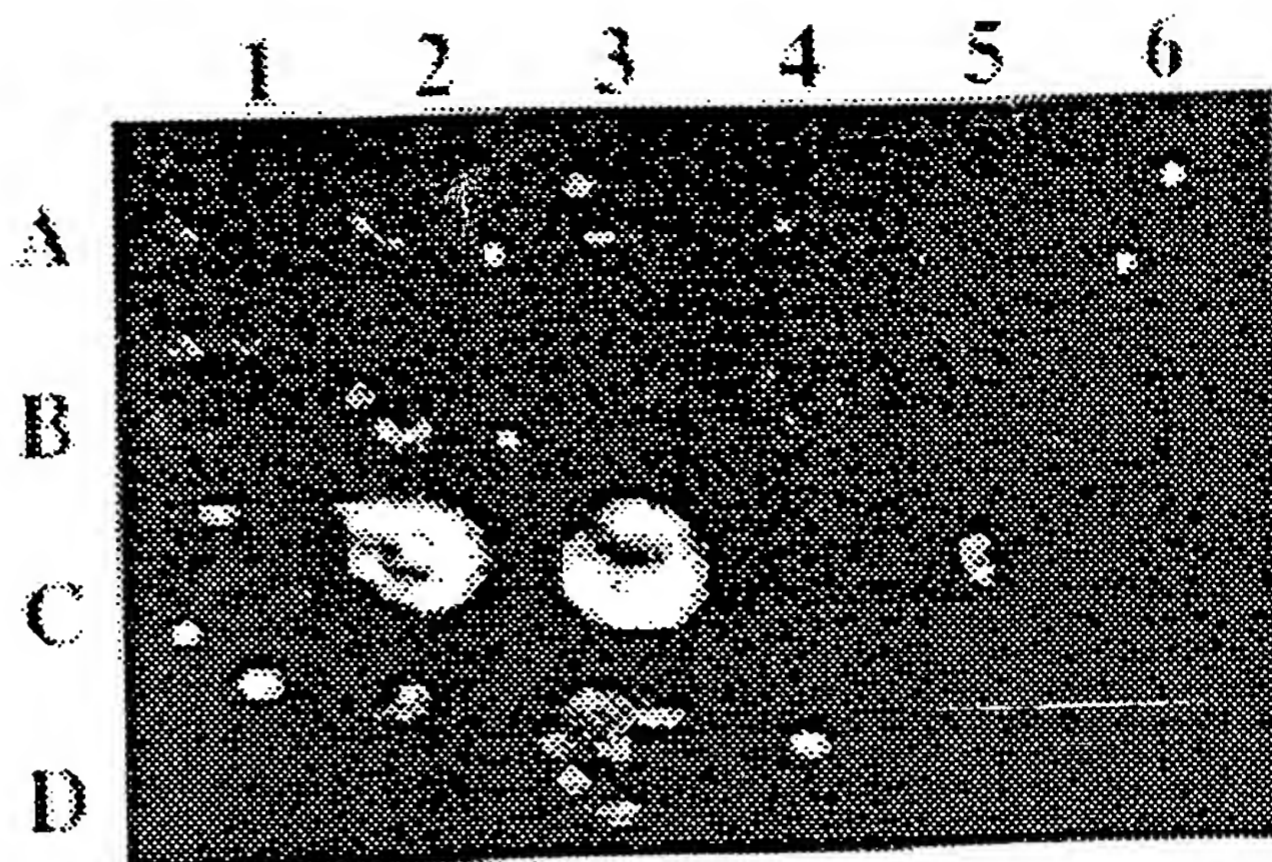


Figure 5

A. H₂N-oligo
 B. OHCH Φ -oligo
 C. H₂NHN-oligo
 D. H₂NHNCO-olig

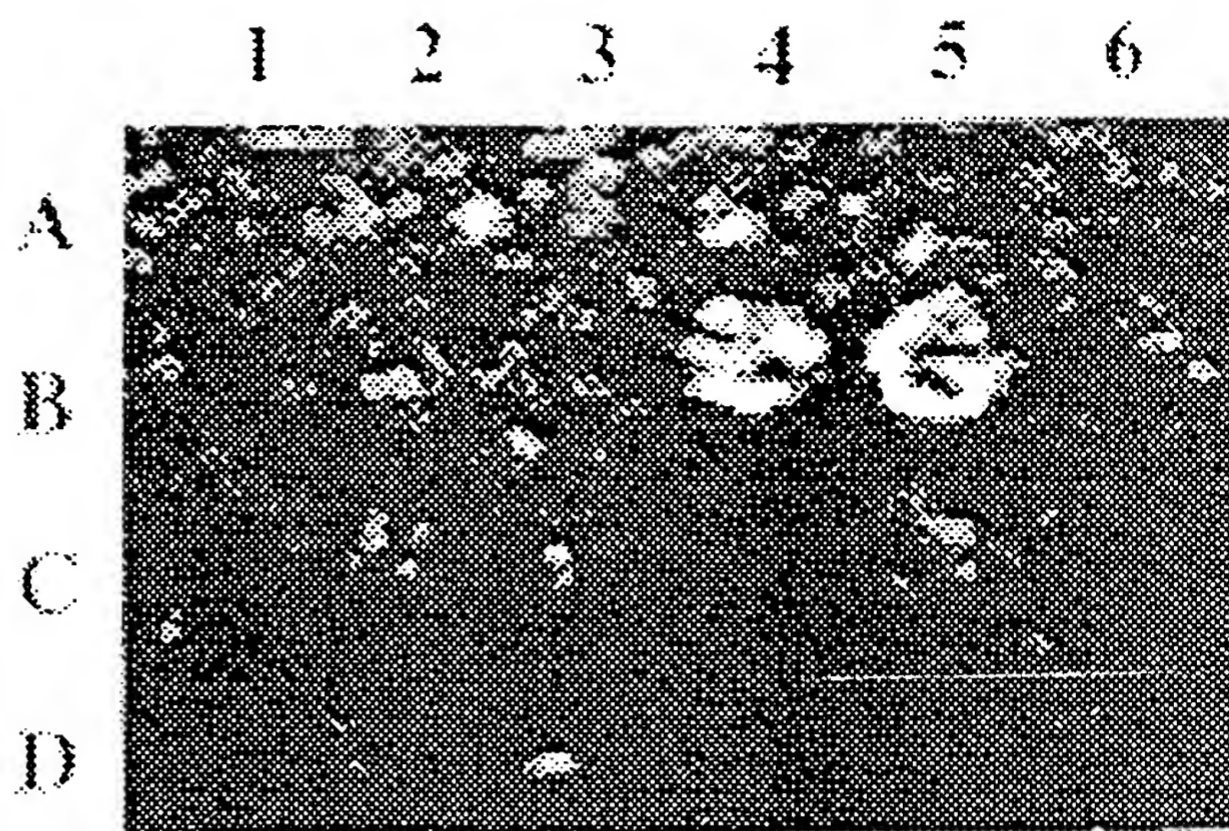


1) polyK (20K MW)
 2) polyK/ Φ CHO (10X)
 3) polyK/ Φ CHO (20X)
 4) polyK/HyNic (10X)
 5) polyK/HyNic (20X)
 6) no polymer

Figure X: Matrix experiment (see Example 2) demonstrating the covalent nature of the immobilization of a 5'-hydrazino oligo//sCHO/poly-l-lysine (polyK) conjugate on a amino modified glass slide following hybridization to its fluorescent complement.

Figure 6

- A. H₂N-oligo
 B. OHC-oligo
 C. H₂NHN-oligo
 D. H₂NHNCO-oligo



- 1) polyK (20K MW)
 2) polyK/sCHO (10X)
 3) polyK/sCHO (20X)
 4) polyK/HyNic (10X)
 5) polyK/HyNic (20X)
 6) no polymer

20540-20500

Figure 7

